

SEP 27 2000

K 801980

**V 510(k) SUMMARY**

Date: June 26, 2000

Aspect Medical Systems, Inc., 141 Needham St. Newton, MA 02464

Contact Person: Christine M. Vozella (617) 559-7028

Proprietary Name: Aspect Medical Systems Pediatric EEG BIS Sensor

Common Name: Electrode, Cutaneous Electrode

Classification: Class II device. Refer to 21 CFR 882.1320.

The Aspect EEG BIS Pediatric Sensor is a single patient use, low impedance, disposable EEG electrode sensor that is designed for application to the frontal/temporal area to enable recording of electrophysiological (such as EEG) signals. It has an electronic smart card memory device in the tab area that contains configuration and identification information.

Indications for use: Applied directly to the patient's skin to enable recording of electrophysiological (such as EEG) signals in pediatric patients.

**Similarities:**

- Similar indications for use as the predicate devices, i.e. the Aspect BIS Sensor predicate device and the Meditrac EKG electrode predicate device.
- Clinical studies were conducted evaluating the performance of the device
- Identical skin contacting materials compared to Aspect predicate device- proven biocompatibility per ISO 10993, and similar non-skin contacting materials
- Same operating principle
- Same ease of use and low impedance function
- Same design
- Same packaging

**Differences:**

- The indications for use for the subject device specifically state that it is for use in the pediatric population, whereas the Aspect predicate device does not specify a patient population.
- The Sensor dimensions are smaller, and the graphics are "child friendly"
- Tab (non-skin contacting) is composed of Polycarbonate. Predicate device tab is composed of ABS (materials have similar properties)

In summary, Aspect Medical systems, Inc. believes the changes described in this submission are minor, the technological characteristics remain essentially unchanged, and thus suggest that the EEG Pediatric BIS Sensor is substantially equivalent to the predicate devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

SEP 27 2000

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Ms. Christine M. Vozella  
Director, Regulatory Affairs and  
Quality Assurance  
Aspect Medical Systems, Inc.  
141 Needham Street  
Newton, Massachusetts 02464

Re: K001980  
Trade Name: Pediatric EEG BIS Sensor  
Regulatory Class: II  
Product Code: GXY  
Dated: June 28, 2000  
Received: June 29, 2000

Dear Ms. Vozella:

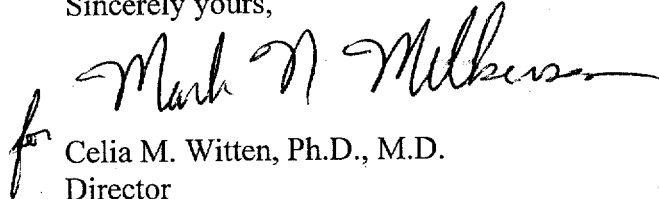
We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4595. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten", is written over the typed name. To the left of the signature is a small, stylized handwritten mark that looks like a lowercase "f" or a checkmark.

Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

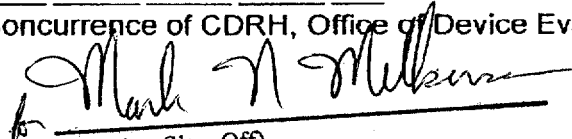
510(k) Number (if known): K 001980

Device Name: Aspect Medical Systems Pediatric EEG BIS Sensor

Indications For Use: The Aspect Pediatric BIS Sensor is applied directly to the patient's skin to enable recordings of electrophysiological (such as EEG) signals in pediatric patients.

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
\_\_\_\_\_  
(Division Sign-Off)

Division of General Restorative Devices

510(k) Number K 001980

(Optional Format 3-10-98)